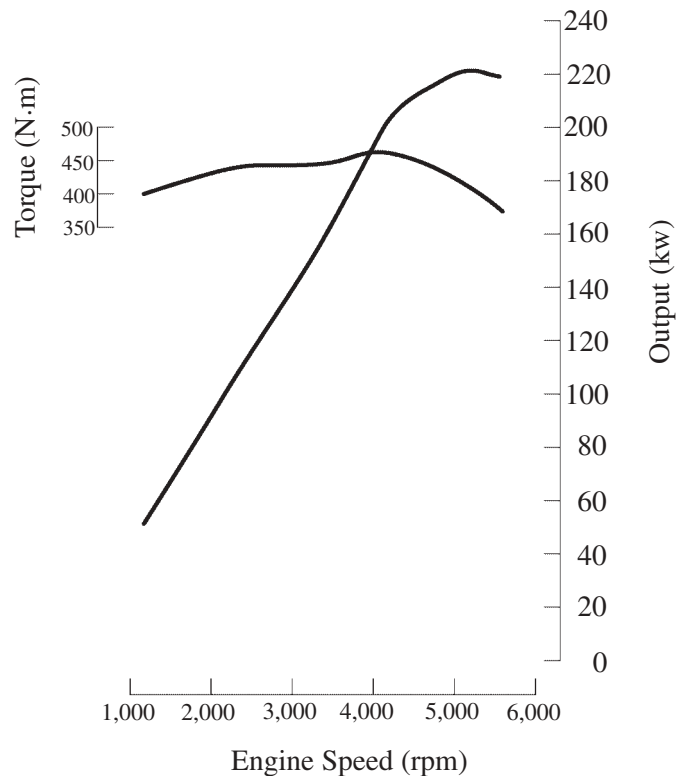


ENGINE SPECIFICATIONS AND PERFORMANCE CURVE

Engine		1GZ-FE	
Item			
No. of Cyls. & Arrangement		12-Cylinder, V-Type	
Valve Mechanism		48-Valve, DOHC, Chain & Gear Drive	
Combustion Chamber		Pentroof Type	
Manifolds		Cross-Flow	
Fuel System		EFI	
Displacement cm^3 (cu.in.)		4996 (304.9)	
Bore x Stroke mm (in.)		81 x 80.8 (3.19 x 3.18)	
Compression Ratio		10.5 : 1	
Max. Output		220 kW @ 5200 rpm	
Max. Torque		460 N·m @ 4000 rpm	
Valve Timing	Intake	Open	$-7^\circ \sim 53^\circ$ BTDC
		Close	$57^\circ \sim -3^\circ$ ABDC
	Exhaust	Open	41° BBDC
		Close	3° ATDC
Fuel Octane Number (RON)		97 or more	
Oil Grade		API SH EC-II, SJ EC or ILSAC	

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